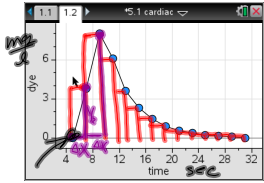
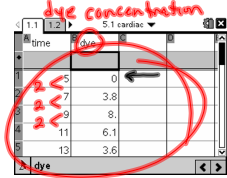


5.1b Estimating With Finite Sums

Ex 4 cardiac output

cardiac output =  $\frac{5.6 \text{ mg}}{\text{area under curve}}$



output =

$$\frac{5.6 \text{ mg}}{55.1 \frac{\text{mg} \cdot \text{sec}}{\text{l}}} = \frac{5.6}{55.1} \frac{\text{l}}{\text{sec}} \cdot \frac{60 \text{ sec}}{1 \text{ min}} = 6 \frac{\text{l}}{\text{min}}$$

$$\begin{aligned} RRAM &= y_1 \Delta x + y_2 \Delta x + \dots + y_n \Delta x \\ &= [y_1 + y_2 + \dots + y_n] \Delta x \\ [sum(dye) - 0] \cdot 2 &= 55.1 \\ 55.1 \frac{\text{mg} \cdot \text{sec}}{\text{l}} \end{aligned}$$

$$\begin{aligned} RRAM &= [sum(y_{list}) - \text{first } y] \Delta x \\ LRAM &= [sum(y_{list}) - \text{last } y] \Delta x \end{aligned}$$

Nov 8-9:59 PM

Oct 31-1:46 PM